## **COMMON SPECIAL PROVISIONS**

Note: All references are to FAA Order 8900.1, volume 3, chapter 6, unless other wise noted

SPECIAL PROVISIONS: Special provisions are conditions, requirements, or limitations necessary to protect non-participating persons and property on the surface and other users of the national airspace system. Each Certificate of Waiver or Authorization must include special provisions as determined by the issuing FSDO to ensure an acceptable level of safety ( ref. Paragraph 3-155)

*Applicability*. Many special provisions are common in nature and are applicable to most aviation events. Other provisions may apply only to certain types of events. Provisions that appear on the waiver or authorization should be limited to protective measures, controls, or requirements that are not otherwise specified by the regulations. Regulatory requirements that are not waived should not be included as special provisions. Waiver provisions never supersede aircraft airworthiness operating limitations. (Ref 3-155.A)

**Ensuring Safety.** The special provisions ensure that the event can be conducted without an adverse effect on safety. Every waiver or authorization shall contain special provisions to ensure an equivalent level of safety for the non-participating public and non-participating air traffic. (Ref 3-155.B)

*Use of Special Provisions:* Some events require extensive and highly detailed special provisions, whereas the special provisions for other events can be less detailed. In addition to variation among events, local conditions may have a significant impact on the necessary special provisions. Ensure that all special provisions issued are appropriate for the event.(Ref 3-155.C)

- 1. Special provisions may pertain to associated protective measures and control requirements that may not be specifically covered by the regulations. In addition, it may be necessary to increase one regulatory minimum in order to authorize safe deviation from another. (Ref 3-155.C.1)
- 2. The special provisions should be typed with as little editorial change as possible onto the Certificate of Waiver or Authorization form or on attached pages. Numbers and language can be inserted or changed to suit each event only when necessary, appropriate, and in accordance with the guidance contained in FAA Order 8900.1, Volume 3, Chapter 6. Editorial comments enclosed in square brackets, [], should not be included on the certificate.(Ref 3-155.C.2)

Common Special Provisions. Only the appropriate special provisions should be included on a Certificate of Waiver or a Certificate of Authorization. Failure to comply with any standard or special provision is a violation of the terms of this Certificate of Waiver or Certificate of Authorization and justification for cancellation of this Certificate and constitutes a violation of Title 49 of the United States Code Section(s) 44711(a)(2)(B) and/or 44711(a)(5).

- 1. The FAA has the authority to cancel or delay any or all acts or events if the safety of persons or property on the ground or in the air are in jeopardy, or there is a violation of the terms of the waiver or authorization. (Ref. FAA Order 7120.3,18-1-9)
- 2. The responsible person will ensure that notification is made to the [Insert FSS name] Flight Service Station (FSS) of the date, time, place, areas, altitudes, nature of the activity, and duration of the operation and request that a Notice to Airmen (NOTAM) be issued. Such notice shall be accomplished by providing the controlling flight service station (FSS) with a copy of the Certificate of Waiver or Authorization, if requested, at least 48 hours before the event and no more than 72 hours before the event. (Ref. 3-144.E.5)

Note: Do not include if TFR NOTAM is issued by ATO-R for the aviation event. (Ref. 3-144.E.4)

- 3. The responsible person named in Item 2 on the waiver or authorization application FAA Form 7711-2 must ensure that participants are thoroughly briefed on special field rules, manner and order of events and are available for briefing on the provisions of the waiver or authorization before beginning the activities. No person may participate in any event listed on the Waiver or Authorization unless that person has signed a statement stating that they have received a briefing on the provisions of the Waiver or Authorization. Teams may be represented by a participating performer of that team. (Ref. 3-144.C.1).
- 4. All civil aircraft and pilots participating in the demonstration shall be available for FAA inspection at time and place agreed upon by the responsible person and the FAA IIC (Ref 3-145)
- 5. For civil aircraft, only required flight crewmembers by type design, safety pilots as listed in FAA Order 8900.1, Volume 3, Chapter 6, or those persons required to participate in the demonstration (wing walkers, stunt persons, actors integral to the performance, and those conducting safety related functions) will be carried on any aircraft engaged in demonstrations authorized by this waiver or authorization (3-145.B).

- 6. All civil pilots who perform aerobatics must possess:
- a. A valid FAA Form 8710-7, Statement of Acrobatic Competency, or Transport Canada Aviation (TCA), Form 26-0307, Statement of Aerobatic Competency. All limitations on the form will be adhered to including altitude restriction for the entire performance (3-145.A.1).
- b. Performers that execute maneuvers more 75 degrees of bank but no more than 90 degrees and/or pitch attitudes more than 60 degrees but no more than 90 degrees of bank only require a logbook endorsement or competency letter from a qualified evaluator (Ref. 3-145 A.2).
- c. Documentation of performing or practicing their performance(s) within the previous 15 days (Ref 3-145.A.4).
- 7. Pilots who wish to conduct non-aerobatic formation flight in waivered airspace must possess a valid industry formation training and evaluation credential acceptable to the FAA (3-145.E.1).
- 8. Persons or aircraft not appearing on the waiver or authorization application and subsequently added to the Certificate of Waiver or Authorization may not participate without specific approval by the Responsible person or air boss. The Responsible person or air boss will notify the FAA IIC by the most expeditious means of any change made (Ref. 3-144.C.14).
- 9. No demonstrations shall be authorized or scheduled when a suspension of airport traffic or diversion of other aircraft traffic would cause a hardship to schedule air carrier operations (3-148.B.2).
- 10. Civilian flying performers who <u>do not</u> hold a FAA Form 8710-7 or Canada's TCA form 26-0307, Statement of Acrobatic Competency with a Level 1 altitude authorization may conduct non-aerobatic fly-bys:
  - a. No closer than the 500 feet show line.
- b. Ingress/egress shall be no closer than 500 feet laterally to the ends of the primary spectator area.
- c. No lower than 100 feet AGL when operating a jet or turbojet airplane within 1,000 feet of a designated spectator area unless the pilot is in possession of a current Surface Level 1 Statement of Aerobatic Competency for that airplane. (Ref 3-147.J)
- 11. For the purpose of this event, the definition of aerobatic flight contained in 14 CFR § 91.303 is waived (Ref 3-143.A.2).

- 12. The following aircraft attitudes will be considered aerobatic flight:
- a. For all solo aircraft: when the pitch angle exceeds a positive or negative 60° angle from the horizon, and/or when the bank angle exceeds 75° (Ref 3-143.A.2).
- b. For formation flights: when the pitch angle exceeds a positive or negative  $45^{\circ}$  angle from the horizon, and/or when the bank diverges from level flight in excess of  $60^{\circ}$  (3-145.D).

## 13. Repositioning Turns.

- a. All military pilots and civilian holders of a statement of aerobatic competency card are permitted to perform repositioning turns using a maximum of 120 degrees of bank and 90 degrees of pitch when above 500 feet AGL and not over designated spectator areas or congested areas.
- b. Holders of an endorsement for pitch and bank angles up to 90 degrees are permitted to perform repositioning turns to those limits above 500 feet AGL when not over designated spectator areas or congested areas. (Ref 3-147.L)
- 14. A control point shall be established where the certificate holder or representative shall direct the demonstration. This person shall be continuously available to the FAA and is the person designated as responsible for the overall safety of the event (Ref 3-143.A.14).
- 15. A show line (man-made or natural) clearly visible to the performers/pilots shall be provided to assist them in compliance with the approved distances from the spectator area(s). The show line will include a clearly visible show center marker and corner markers that are 500 feet beyond the spectator areas along the crowd line to provide reference to pilots entering or leaving the flying display area (Ref. 3-147).
- 16. Except when authorized during takeoff or landing, aircraft that operate at speeds of 156 knots or less and certain other Category III aircraft shall perform no closer than 500 feet horizontally from the spectator area[s]. Any single reciprocating-engine airplane with a maximum certificated gross weight of no more than 2,250 lbs. is also a Category III aircraft (See Table 3-1).

Note: The dimensions of the aerobatic area (the area referred to as "C" in Figure 3-24) for Category III aircraft may vary. It only needs to be large enough to provide sufficient space for Cat III performers to complete their aerobatic maneuvers within it. The only requirement that may not be altered is that the minimum distance from each side of this aerobatic area to the primary and secondary spectator areas respectively may not be less than 500 feet at any time.

17. Except when authorized during takeoff or landing, aircraft that operate at speeds of more than 156 knots but 245 knots or less shall perform aerobatic maneuvers no closer than 1,000 feet horizontally from a single spectator area. If two spectator areas are used, the show lines may be no less than 800 feet from one spectator area and no less than 1,000 feet from any other designated spectator area (See Table 3-1).

Note: The dimensions of the aerobatic area may vary. It only needs to be large enough to provide sufficient space for Cat II performers to complete their aerobatic maneuvers within it. The only requirement is that the minimum distance from each side of this aerobatic area to the primary and secondary spectator areas respectively may normally not be less than 1000 feet. This distance may be reduced only on one side only of the Cat II aerobatic area to no less than 800 feet from either the primary or secondary spectator areas in accordance with the guidance provided in Paragraph 3-147, Table 3-1.

18. Except when authorized during takeoff or landing, aircraft that operate at speeds of more than 245 knots shall perform aerobatic maneuvers no closer than 1,500 feet horizontally from a single spectator area. If two spectator areas are used, the show line may be no less than 1,200 feet from one of the designated spectator areas, and no less than 1,500 feet from any other designated spectator area. Single Cat I airplanes or the center of formation flights of Cat I airplanes must be centered on this show line (See Table 3-1).

NOTE: For reciprocating engine powered airplanes, these distances are predicated on true airspeed in straight and level flight at 75 percent power at standard temperature and pressure (15°C/sea level) and maximum certificated gross weight. For turbine engine powered airplanes, the distances are based on 85 percent of the maximum continuous powered straight and level flight true airspeed at standard temperature, pressure, and maximum certificated gross weight. Any turbine engine powered airplane for which valid performance data acceptable to the FAA is not available will be required to perform on or beyond the Category I show line.

19. Supersonic and/or trans-sonic speeds are prohibited. (14 CFR Section 91.817)

Note: This special provision should only be included if an aircraft scheduled in the event is capable of operating at supersonic and trans-sonic speed.

- 20. Adequate communication capability (electronic and visual) must be provided to maintain a safe operation, to control spectators, and to advise participants that the aerial demonstration has been halted or canceled (Ref 3-160.A.11)
- 21. A crowd line consisting of a physical barrier and/or adequate policing shall be provided to confine the spectators to designated areas. The spectator areas shall have well defined lateral boundaries (Ref 3-143.A.17).

- 22. The demonstration shall be halted for any reason that is in the interest of safety. It shall also be halted when unauthorized aircraft enter the air show operations area, or when unauthorized persons or vehicles enter the area underlying the aerobatic maneuvering area. Only the minimum number of authorized persons necessary to support operations will be authorized in the operating areas. The holder of the Certificate of Waiver or Authorization assumes responsibility for persons who enter the operations area (8900.1, Volume 6, Section 10, 6-2373.B).
- 23. Aircraft engines shall not be started and aircraft shall not be taxied in designated spectator areas or static display areas unless adequate measures are taken to protect the spectators. Areas where engines and propellers will be turning must be at least 100 feet from the spectator area and areas where rotors are turning must be at least 200 feet from the spectator area. Areas where engines and propellers are turning that are protected by a physical barrier or guarded by wing-walkers, marshallers, and crowd control monitors that will prevent entry by unauthorized personnel, must be at least 50 feet from the spectator area (Volume 3, Chapter 6, Table 3-2).
  - 24. Flight demonstrations shall not be conducted unless the ceiling is at least 1,500 feet, and the visibility is at least 3 statute miles at the time of the demonstration unless the IIC reduces the ceiling limitation to 1,000 feet AGL. If 14 CFR Section 91.155 is waived the cloud separation may be reduced to "Clear of Clouds" by the IIC. No other reductions in weather requirements shall be made (Ref 3-154)
  - 25. Aircraft maneuvers may not direct energy toward primary spectator areas. Certain related maneuvers and procedures, however, may be authorized as outlined below:
  - a. Non-aerobatic maneuvers where the aircraft is pointed at the primary spectator area are permitted as long as the aircraft is beyond the appropriate show line for category (i.e. 500 feet for CAT III; 1,000 feet for CAT II and 1,200 to 1,500 for CAT I) without energy towards the crowd considerations. (Ref. 3-147.K)
  - b. Aerobatic maneuver conducted inside the aerobatic box that in the event of a catastrophic failure a part of the aircraft would contact the surface at or inside the primary spectator area between the corner markers are prohibited. (Ref. 3-147.K)
  - c. Aerobatic maneuvers that do not fit the description in 25(a) or 25(b) above require AFS-800 approval. (Ref. 3-147.K)
  - d. Maneuvers on an oblique line that pass 500, 1,000, or 1,500 feet to either side of a spectator area as appropriate to the category of aircraft being flown during oblique aerobatic maneuvers. (Ref. 3-147.K)

- 26. For the U.S. Air Force Thunderbirds and Heritage Flights, U.S. Navy Blue Angels, and Canadian Snowbirds approved maneuvers include level or climbing (normal rate) non-aerobatic flight over any spectator no less than 500 feet above the highest point in the primary spectator areas. All other performers must be at or above 1,000 feet above the highest point in the primary spectator areas (Ref 3-147.H).
- 27. Any maneuver or speed approved by AFS-800 in the FAA approved maneuvers package or FAA accepted military order are permitted if performed as approved and are exceptions to FAA Order 8900.1, Volume II, Chapter 6. However, for the North American sanctioned military jet teams, flight below 500 feet AGL over occupied buildings is permitted in the transition areas depicted in their maneuvers package. Low altitude ingress and egress routes below 500 feet AGL other than the transition area require FAA IIC approval (3-148.B.5b).
- 28. An arrival demonstration is not authorized unless an advance member of the demonstration team has been briefed on the show line and pertinent special provisions of the waiver. This information must be relayed to the team leader before the arrival demonstration (Ref. 3-148.B.4)
- 29. The following facilities shall be provided and readily available at the demonstration site. [List the emergency and medical equipment or personnel that the sponsor and the IIC have agreed are needed, and include an emergency plan.] (Ref. FAA Form 7711-2, Block 14)
- 30. To alert non-participating aircraft, a closed field signal in the form of a large "X," which is readily visible from 3,000 feet above the surface, must be displayed on a prominent part of the airport when the aerial demonstration is in progress. [This closed field signal is necessary at most uncontrolled airports and airports which have only a non-Federal control tower, but is usually not required at airports which have a Federal control tower. Ensure the X is placed where it will not be a hazard to aircraft operating on the surface.] (Ref 3-143.A.15)
- 31. The responsible person will ensure that roads and buildings under the specified aerobatic maneuvering area are devoid of vehicular and pedestrian traffic and/or persons (Ref. 3-144.C.11).

- 32. Spectator areas may not be closer than 500 feet from any takeoff and landing runway when the approach speed (V<sub>ref</sub>) of any aircraft exceeds 100 knots and/or for any aircraft that has a certificated gross weight of more than 50,000 pounds. Aircraft with both an approach speed (V<sub>ref</sub>) of 100 knots or less and a certificated gross weight of 50,000 pounds or less shall be required to use a runway that is at least 300 feet from the spectator area. If ALL aircraft and ultra-lights in an air show have approach speeds of less than 60 knots, and certificated gross weight of less than 2,500 pounds, and there is no excessive maneuvering during takeoff or landing, spectators may be as close as 200 feet to the takeoff or landing runway. The "flying farmer" or similar comedy routines that involve excessive non-aerobatic maneuvering immediately after takeoff or just before landing must also be separated from the spectator area by at least 500 feet. These distances can be measured to the runway centerline for single aircraft operations, in which case the aircraft are expected to operate on the runway centerline. For formation takeoffs/landings, this distance shall be measured to the runway edge (Ref. Table 3-2).
- 33. Aircraft equipped with operable ejection seats or jettisoned tanks must be identified as such to the event sponsor and on-site crash rescue services (Ref 3-144.B.1).
- 34. In the event that a performance involves aircraft operating in the vicinity of parachutists, whether in free-fall or under deployed canopies, all pilots and the jump master or team leader of the parachutists involved shall be present at the air show briefing. The air boss or responsible person shall ensure that each participant understands the details of the performance which shall include, at the minimum, the following information:
  - (a) The number of jumpers performing,
  - (b) The types of and/or colors of parachutes,
  - (c) The exit altitude and deployment altitude,
  - (d) The planned flight path prior to exit, as well as, the descent area of the jump aircraft,
  - (e) The number, make(s)/model(s) and color of the aircraft involved, and
  - (f) Procedures to be used in the event of an unexpected occurrence.

Note: An endorsement of "Circling the Jumpers" on FAA Form 8710-7 is no longer required for the circling aircraft pilots. (Figure 3-42).

35. Upon request of the FAA, civil aircraft pilots must show evidence of performing or practicing their performance(s) within the previous 15 days (Ref. 3-145, A.4).

**Note**: This evidence can be a logbook endorsement, a written statement or by noting this date on the waiver when signing the waiver at the show site. The required practice or performance must be in the aircraft and of the maneuvers that will be performed at this event.